

IN THE CLAIMS:

1. (Previously Amended) A cranial flap clamp for fixing a bone flap to a skull comprising:

a first clamping member having inner and outer surfaces, at least a portion of the inner surface positionable against inferior surfaces of the bone flap and skull;

an extension member extending from the first clamping member and configured and dimensioned to fit between the bone flap and the skull;

a second clamping member having inner and outer surfaces and an opening through the inner and outer surfaces for slidably receiving the extension member, with at least a portion of the inner surface positionable against superior surfaces of the bone flap and skull,

wherein movement of at least one of the first and second clamping members from a first position with the second clamping member distal to the first clamping member to a second position with the second clamping member proximal to the first clamping member urges the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and urges the inner surface of the second clamping member against the superior surfaces of the bone flap and skull; and

an integrally formed stop on the extension member provided by mechanical deformation of the extension member at a surgeon selected location along its length and adjacent the outer surface of the second clamping member when the first and second clamping members are in the second position to secure the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and the inner surface of the second clamping member against the superior surfaces of the bone flap and skull.

2. (Currently Amended) A cranial flap clamp for fixing a bone flap to a skull comprising:
a first clamping member having inner and outer surfaces, at least a portion of the inner surface positionable against inferior surfaces of the bone flap and skull;
an a substantially smooth extension member extending from the first clamping member and configured and dimensioned to fit between the bone flap and the skull;
a second clamping member having inner and outer surfaces and an opening through the inner and outer surfaces for slidably receiving the extension member, with at least a portion of the inner surface positionable against superior surfaces of the bone flap and skull,

wherein movement of at least one of the first and second clamping members from a first position with the second clamping member distal to the first clamping member to a second position with the second clamping member proximal to the first clamping member urges the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and urges the inner surface of the second clamping member against the superior surfaces of the bone flap and skull; and

~~a stop provided by mechanical deformation of the extension member at a surgeon-selected location along its length and adjacent the outer surface of the second clamping member when the first and second clamping members are in the second position to secure the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and the inner surface of the second clamping member against the superior surfaces of the bone flap and skull;~~

~~wherein the inner surfaces of the first and second clamping members are substantially smooth.~~

3. (Original) The cranial flap clamp of claim 2 wherein the inner surfaces of the first and second clamping members are concave with the first and second clamping members in the first position and the inner surfaces of the first and second clamping members flatten out when the first and second clamping members are in the second position.

4. (Currently Amended) The cranial flap clamp of claim 3 wherein the second clamping member has a disk shape with a plurality of cutouts extending radially inwards from an outer circumference of the second clamping member ~~the opening~~.

5. (Currently Amended) The cranial flap clamp of claim ~~1~~ 2, wherein the extension member is a tube and the stop comprises a crimp in the tube.

6. (Original) The cranial flap clamp of claim 5 wherein the extension member includes a head located at a distal end and the first clamping member includes a bore for slidably receiving the extension member, the head engaging edges of the bore to prevent the first clamping member from sliding off the extension member.

7. (Original) The cranial flap clamp of claim 6 wherein the tube has an enlarged portion near the inner surface of the first clamping member for preventing movement of the first clamping member along the tube away from the head.

8. (Original) The cranial flap clamp of claim 5 wherein, when the first and second clamping members are in the first position, the tube includes a flared proximal portion for preventing the second clamping member from sliding off the tube.

B) 9. (Original) The cranial flap clamp of claim 5 wherein the opening has a substantially circular shape which is smaller than the crimp.

Cont 10. (Original) The cranial flap clamp of claim 9 wherein the opening includes a countersink for receiving the stop and the stop fits substantially within the countersink.

11. (Currently Amended) A cranial flap clamp for fixing a bone flap to a skull comprising:

a first clamping member having inner and outer surfaces, at least a portion of the inner surface positionable against inferior surfaces of the bone flap and skull;

an extension member extending from the first clamping member and configured and dimensioned to fit between the bone flap and the skull;

a second clamping member having inner and outer surfaces and an opening through the inner and outer surfaces for slidably receiving the extension member, with at least a portion of the inner surface positionable against superior surfaces of the bone flap and skull,

wherein movement of at least one of the first and second clamping members from a first position with the second clamping member distal to the first clamping member to a second position with the second clamping member proximal to the first clamping member urges the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and urges the inner surface of the second clamping member against the superior surfaces of the bone flap and skull; and

wherein at least one of the clamping members has a plurality of radial cutouts extending radially inwards from an outer circumference of the member, the radial cutouts being configured to allow the clamping member to at least partially conform to the outer surface of the bone flap and skull.

~~a stop provided by mechanical deformation of the extension member at a surgeon selected location along its length and adjacent the outer surface of the second clamping member when the first and second clamping members are in the second position to secure the inner surface of the first clamping member against the inferior surfaces of the bone flap and skull and the inner surface of the second clamping member against the superior surfaces of the bone flap and skull;~~

~~wherein the extension member is a ribbon and the opening of the second clamping member has a rectangular shape.~~

12. (Currently Amended) The cranial flap clamp of claim 11 ~~76~~ wherein the stop comprises a twisted portion of the ribbon.

13. (Original) The cranial flap clamp of claim 12 wherein the second clamping member is provided with a recessed area surrounding the opening, wherein the stop fits substantially within the recessed area.

14. (Currently Amended) The cranial flap clamp of claim 13 wherein the recessed area has a width that increases from the center of the opening, a depth that increases from the center of the opening and edges which forms a cutting surface so that the stop may be formed by twisting and shearing of the ribbon.

15. (Original) The cranial flap clamp of claim 11 wherein the extension member is integral with the first clamping member.

16. (Original) The cranial flap clamp of claim 11 wherein the second clamping member has at least one fastener hole for receiving a fastener.

17. (Canceled)

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20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Currently Amended) A cranial flap clamp for fixing a bone flap to a skull comprising:

a first clamping member positionable against inferior surfaces of the bone flap and skull;

an extension member extending from the first clamping member and configured and dimensioned to extend between the bone flap and the skull;

a second clamping member positionable against superior surfaces of the bone flap and skull and comprising an opening in which a portion of the extension member is disposed; and

an integrally formed stop on the extension member for limiting movement of the second clamping member when the first clamping member abuts the inferior surfaces and the second clamping member abuts the superior surfaces;

wherein the portions of the first and second clamping members that abut the surfaces of the bone flap and skull are substantially smooth.

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28. (Canceled)

29. (Previously Added) The cranial flap clamp of claim 27, wherein the first and second clamping members each further comprise a disk shape.

30. (Currently Amended) The cranial flap clamp of claim 29, wherein the second clamping member further comprises a plurality of cutouts extending radially inwards from an outer circumference of the member oriented radially with respect to the opening.

31. (Previously Added) The cranial flap clamp of claim 27, wherein the extension member comprises a tube and the stop comprises a crimp in the tube.

32. (Previously Added) The cranial flap clamp of claim 31, wherein the opening has a substantially circular shape that is smaller than the crimp.

33. (Previously Added) The cranial flap clamp of claim 27, further comprising a head disposed on the extension member proximate the first clamping member.

34. (Previously Added) The cranial flap clamp of claim 27, wherein the first clamping member comprises a bore for receiving the extension member.

35. (Previously Added) The cranial flap clamp of claim 27, wherein the opening comprises a countersink and the stop is disposed substantially within the countersink.

36. (Previously Added) The cranial flap clamp of claim 27, wherein the first and second clamping members each comprise an arcuate outer edge.

37. (Previously Added) The cranial flap clamp of claim 27, wherein the extension member comprises a ribbon.

38. (Previously Added) The cranial flap clamp of claim 37, wherein the stop comprises a twisted portion of the ribbon.

39. (Previously Added) The cranial flap clamp of claim 27, wherein the stop comprises a twisted portion of the extension member.

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40. (Previously Added) The cranial flap clamp of claim 27, wherein the second clamping member comprises a recessed area proximate the opening.

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41. (Previously Added) The cranial flap clamp of claim 40, wherein the stop is received in the recessed area.

42. (Currently Amended) The cranial flap clamp of claim 40, wherein the recessed area ~~has a width that increases from a center of the opening, a depth that increases from the center of the opening, and an edge that forms a cutting surface.~~

43. (Previously Added) The cranial flap clamp of claim 27, wherein the extension member is integral with the first clamping member.

44. (Previously Added) The cranial flap clamp of claim 27, wherein the second clamping member comprises at least one fastener hole for receiving a fastener.

45. (Currently Amended) A cranial flap clamp for fixing a bone flap to a skull comprising:
a first clamping member;
~~an~~ a substantially smooth extension member extending from the first clamping member;
a second clamping member comprising an opening in which a portion of the extension member is disposed; the second clamping member having a plurality of radial cutouts extending radially inwards from an outer circumference of the member; and
an integrally formed stop on the extension member provided by mechanical deformation of the extension member at a surgeon selected location along its length for limiting movement of the second clamping member on the extension member, ~~the stop being disposed proximate an end of the extension member.~~

46. (Previously Added) The cranial flap clamp of claim 45, wherein the extension member is integral with the first clamping member.

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47. (Previously Added) The cranial flap clamp of claim 45, wherein the stop comprises a crimped portion of the extension member.

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48. (Previously Added) The cranial flap clamp of claim 45, wherein the stop comprises a twisted portion of the extension member.

49. (Previously Added) The cranial flap clamp of claim 45, wherein opposing surfaces of the first and second clamping members are substantially smooth.

50. (New) The cranial flap clamp of claim 1, wherein the extension member is substantially smooth.

51. (New) The cranial flap clamp of claim 50, wherein the extension member is integral with the first clamping member.

52. (New) The cranial flap clamp of claim 50, wherein the first clamping member comprises a bore for receiving the extension member.

53. (New) The cranial flap clamp of claim 52, further comprising a head disposed on the extension member for slidably engaging the bore to prevent the first clamping member from sliding off the extension member.

54. (New) The cranial flap clamp of claim 50, wherein, the extension member includes a flared proximal portion for preventing the second clamping member from sliding off.

55. (New) The cranial flap clamp of claim 1, wherein the extension member is a tube and the stop comprises a crimp in the tube.

56. (New) The cranial flap clamp of claim 55, wherein the opening has a substantially circular shape that is smaller than the crimp.

57. (New) The cranial flap clamp of claim 56, wherein the opening includes a countersink for receiving the stop and the stop fits substantially within the countersink.

58. (New) The cranial flap clamp of claim 1, wherein the inner surfaces of the first and second clamping members are concave with the first and second clamping members in the first position and the inner surfaces of the first and second clamping members flatten out when the first and second clamping members are in the second position.

59. (New) The cranial flap clamp of claim 58, wherein the second clamping member has a disk shape with a plurality of cutouts extending radially inward from an outer circumference of the second clamping member.

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60. (New) The cranial flap clamp of claim 1, wherein the extension member is a ribbon and the opening of the second clamping member has a rectangular shape.

61. (New) The cranial flap clamp of claim 60, wherein the stop comprises a twisted portion of the ribbon.

62. (New) The cranial flap clamp of claim 61, wherein the second clamping member is provided with a recessed area surrounding the opening, wherein the stop fits substantially within the recessed area.

63. (New) The cranial flap clamp of claim 62, wherein the recessed area forms a cutting surface so that the stop may be formed by twisting and shearing of the ribbon.

64. (New) The cranial flap clamp of claim 1 wherein the second clamping member has at least one fastener hole for receiving a fastener.

65. (New) The cranial flap clamp of claim 1 wherein the portions of the first and second clamping members that abut the surfaces of the bone flap and skull are substantially smooth.

66. (New) The cranial flap clamp of claim 2, further comprising a stop provided on the extension member, wherein the stop is provided by mechanical deformation of the extension member at a surgeon selected location along its length.

67. (New) The cranial flap clamp of claim 2, wherein the extension member is integral with the first clamping member.

68. (New) The cranial flap clamp of claim 2, wherein the extension member is a ribbon and the opening of the second clamping member has a rectangular shape.

69. (New) The cranial flap clamp of claim 68, further comprising a stop, wherein the stop comprises a twisted portion of the ribbon.

70. (New) The cranial flap clamp of claim 69, wherein the second clamping member is provided with a recessed area surrounding the opening, wherein the stop fits substantially within the recessed area.

71. (New) The cranial flap clamp of claim 70, wherein the recessed area forms a cutting surface so that the stop may be formed by twisting and shearing of the ribbon.

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Cont 72. (New) The cranial flap clamp of claim 2, wherein the second clamping member has at least one fastener hole for receiving a fastener.

73. (New) The cranial flap clamp of claim 2, wherein the portions of the first and second clamping members that abut the surfaces of the bone flap and skull are substantially smooth.

74. (New) The cranial flap clamp of claim 2, further comprising a stop provided on the extension member, wherein the stop is provided by mechanical deformation of the extension member at a surgeon selected location along its length.

75. (New) The cranial flap clamp of claim 11, further comprising a stop provided on the extension member, wherein the stop is provided by mechanical deformation of the extension member at a surgeon selected location along its length.

76. (New) The cranial flap clamp of claim 75, wherein the extension member is a ribbon and the opening of the second clamping member has a rectangular shape.

77. (New) The cranial flap clamp of claim 75, wherein the extension member is substantially smooth.

78. (New) The cranial flap clamp of claim 77, wherein the first clamping member comprises a bore for receiving the extension member.

79. (New) The cranial flap clamp of claim 78, further comprising a head disposed on the extension member for slidably engaging the bore to prevent the first clamping member from sliding off the extension member.

80. (New) The cranial flap clamp of claim 79, wherein the extension member includes a flared proximal portion for preventing the second clamping member from sliding off.

81. (New) The cranial flap clamp of claim 76, wherein the extension member is a tube and the stop comprises a crimp in the tube.

82. (New) The cranial flap clamp of claim 81, wherein the opening has a substantially circular shape that is smaller than the crimp.

83. (New) The cranial flap clamp of claim 82, wherein the opening includes a countersink for receiving the stop and the stop fits substantially within the countersink.

84. (New) The cranial flap clamp of claim 83, wherein the second clamping member comprises a recessed area proximate the opening for receiving the stop.

85. (New) The cranial flap clamp of claim 11, wherein the portions of the first and second clamping members that abut the surfaces of the bone flap and skull are substantially smooth.

86. (New) The cranial flap clamp of claim 27, wherein the extension member is substantially smooth.

87. (New) The clamp of claim 86, further comprising a stop provided on the extension member, wherein the stop is provided by mechanical deformation of the extension member at a surgeon selected location along its length.